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| EXAMINER | | | | |
| JACKSON, MONIQUE R | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1794 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/507,456

Applicant(s)

CASENAVE, CHRISTIAN

Examiner

Monique R. Jackson

Art Unit

1794

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. The amendment filed 11/6/08 has been entered. Claim 12 has been canceled. New claims 16-23 have been added. Claims 1-11 and 13-23 are pending in the application.

Specification

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

3. Claims 1-11 and 13-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As previously recited, a claim in which one ingredient is defined so broadly that it reads upon a second does not meet the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Ferm and Boynton*, 162 USPQ (BdPatApp & Int 1969.) In the instant case, the specification nor the claims provide any clear definitions for the “one or more substances capable of conferring, on said coat, properties of adherence to the substrate and film-forming, corrosion inhibiting and hydrophilic properties” and the “one or more substances capable of conferring, on said coat, antimicrobial properties”. It is noted that on page 3 of the specification, the Applicant lists various substances however it is also noted that these substances can read upon one another, for example the claimed "antimicrobial" substances can also have film-forming, hydrophilic, corrosion inhibiting and adherence to the substrate, and vice versa, and hence, the coating can be formed from a single component and the claimed ratio of 2/100 would be met given that both the 2 and the 100 were the same components. It is also unclear whether the 2 refers to the substance conferring adherence properties, or the substance conferring film-forming, corrosion-inhibiting and hydrophilic properties, or to all of these substances. Further, Claim 1 recites "A process" however there are no clear process steps recited, e.g. coating the surface of the evaporator with a treatment liquid comprising..." and hence it is unclear what the process actually comprise or for what process the Applicant is seeking protection. The claims are further indefinite for the following reasons:

4. Claims 5, 7, 9, 10, 18, 20, 22, and 23 list a number of compounds or substances but fail to provide the list in proper alternative or Markush claim format. Hence, it is unclear whether the substances are provided individually or whether the claims are referring to a mixture of these substances.
5. Claim 14 recite the limitation "the phenomena of adsorption and of desorption" however there is insufficient antecedent basis for this limitation. Further, it is unclear what "phenomena" is being limited. What type of adsorption or desorption?
6. Claims 5, 7, 9, 18, 20, and 22 recite the limitation "types" with regards to the one or more polymers however it has been held that the use of the term "type" extends the scope of the expression as to render it indefinite. See *Ex parte Copenhaver* 109 USPQ 118.
7. Claims 16-19, 21, and 23 recite the limitation "The process as claimed in claim 11" however, Claim 11 is directed to an evaporator not a process and hence it is unclear what is meant to be encompassed by Claims 16-23.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3, 4, 6, 8, 11, 13, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Zhou et al (USPN 6,102,994.) Zhou et al teach a hydrophilic antimicrobial coating comprising a porous ceramic-based coating and at least one biocide dispersed therein, wherein the coating can be an alumina coating and the biocide can include silver oxide or a

second biocide of zinc oxide or copper oxide (Abstract.) Zhou et al teach that the coating composition comprises a binder which may be formed from 1 to 30% alumina in nitric acid, and the biocide, preferably silver, is provided in an amount between 0.5 to 15% of the total weight of solids of the coating (Col. 2-3.) Zhou et al teach that the hydrophilic antimicrobial coating can be applied to a heat transfer surface of a heat exchanger such as formed from aluminum, without a surface conversion step, in a thickness of between 1 and 100 microns (Entire document; Abstract; Col. 3-4.) With regards to the claimed ratio of 2/100, the Examiner notes that the alumina alone provides "film-forming", "corrosion-inhibiting", "hydrophilic" and "antimicrobial" properties.

Response to Arguments

10. Applicant's arguments filed 11/6/08 have been considered but are moot in view of the above.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 200030300A teaches a coating material for the aluminum fin of a heat exchanger of an air-conditioner wherein the coating comprises an antimicrobial-antifungal organometallic agent and a hydrophilic resin in a thickness of 0.01 to 1 microns.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 10:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Monique R Jackson/
Primary Examiner, Art Unit 1794
February 17, 2009